Outsourcing the CSSD a threat?

Or a challenge?!
Introduction

• René Vis
  – VU medical center, Amsterdam
  – Responsible person for sterilization and all sterile medical devices in the hospital
    • Deskundige steriele medische hulpmiddelen
• 1984
  – Legislation on sterilization in hospitals
    • Board of directors is responsible
    • Appoint a responsible person for sterilization and sterile medical devices
      – Quality control of production
      – Quality control of storage and distribution
      – Responsible for the validation of washer disinfectors and sterilizers
VU medical center

- University hospital
- 750 beds
- 4000 staff
- 21 operation rooms
Outsourcing

- The practice of subcontracting manufacturing work to outside companies

- Critical words:
  - (sub) contracting
  - Outside companies
Outsourcing is a trend

- IT Services
- Maintenance departments
- Restaurants
- Laundry

- Is the CSSD going to be next?!
  - England
  - France
  - Germany
In-sourcing?

• Is the CSSD the “inside company”?
• Is there a contract for the reprocessing?

• Is the CSSD considered to be the money consuming cleaning department or the businesslike unit that is the professional partner within the hospital?
Why outsource?

• Improve quality of the service
  – Qualified staff
  – Complying with national or international standards and guidelines
  – Implementing a quality system

• Major investments
  – Equipment
  – Building
  – Staff training

• Limited space
Back to core business!

• Cost reduction!
  – No staff?
  – No equipment?
  – No maintenance?
  – No validation of equipment and processes?
  – No housing costs?

• Only doctors and nurses?

• Is the CSSD and the reprocessing and quality control of medical devices seen as the core business?
Core business of the Turkish airlines
Who makes the decisions?

- Board of directors
- Triggered by:
  - Customers within the hospital
  - Outsourcing companies
  - Government
    - Legislation
    - Regulations
    - Standards
    - Requirements
Considerations for reprocessing in a hospital or by an outside company

- Cost containment
  - Costs per reprocessed tray:
    - Salaries of staff
    - Continuous education and training
    - Equipment, maintenance, validation
    - Overheads
- Quality of the service
- Turnover time and the limitations
- Ownership of the surgical instruments
Services provided by CSSD?

- Reprocess surgical instruments
  - Compliance with prEN 17664
    - Information to be provided by the manufacturer for the processing of resterilizable medical devices
- Managing sterile storage
- Distributing sterile medical devices
- Quality control sterile medical devices
Additional value

- Knowledge of reprocessing surgical instruments
- Knowledge of cleaning, disinfection and sterilization
- Co-decision maker in the process of purchasing medical devices
- Part of the quality chain of sterile medical devices
Reprocessing

- Collection of used instruments at point of use
- Transport from point of use
- Collection at sterilization facility
- Identification of instruments and trays
- Cleaning
- Disinfection
- Function control
- Tray assembly
- Packaging
- Sterilization
- Storage
- Distribution to point of use
What are the parameters?

• Costs to run a CSSD
  – Staff
  – Housing
  – Energy
    • Steam
    • Electricity
    • Heating
    • Air-treatment unit
  – Maintenance and validation of equipment
Logistics

• Turnover time of instrument trays
  – General trays
  – Specific trays
  – Critical trays
  – Replacing lost or damaged instruments

• Production and storage
  – Cleaning and disinfection
  – Packaging and sterilization
  – Transport systems
  – Storage systems
Equipment

• Machines
  – Washers disinfectors
  – Sterilizers
  – Tables, sinks, ultrasonic cleaners
  – Computers

• Surgical instruments
  – Amount and types of trays
  – Standardised instruments
  – Specialized instruments
Consumables

- Bowie & Dick tests packs
- Cleaning and disinfection tests
- Packaging material
- Chemicals
  - Detergents, disinfectants
What to do?

• Prepare!
  – Research on production data
  – Research on inventory
  – Condition of inventory
  – Annual costs
    • Staff
    • Training
    • Maintenance
    • Overheads
  – Knowledge of national and international standards and requirements
Talk to the customers

- What is the desired service?
  - Is that a realistic demand?
- Awareness of two-way partnership?
- Is further standardisation of instruments and trays an option?
- Will there be a need for a facility for reprocessing surgical instruments within or near the operation theatre complex?
  - Who will be responsible for that unit?
Compliance with standards

- EN 285
  - steamsterilizers
- EN 554
  - Validation of steamsterilizers
- EN 1422
  - ETO
- EN 14180
  - LTSF
- EN 15883
  - Washer disinfectors
VUmc CSSD

- 35 staff members
- 7 washers disinfectors (7 x 10 instrument trays)
- 4 large steam sterilizers (4 x 24 instrument trays)
- 1 small steam sterilizer (6 instrument trays)
- 12 packaging tables
Decontamination area
Packaging and sterilization
CSSD Statistics

- Production hours:
  - Monday to Friday 7.30 till 23.00
  - Sunday 7.30 till 17.00
- Turnover time 5-6 hours
- Production is 60,000 sterilization modules
  - 30x60x30 cm (EN 285)
    - 120,000 instrument units
- Instrument inventory
  - Over 10,000 instruments
  - 8 million Euros
Calculating price per tray

Annual costs

- Staff € 1,110,000
- Equipment/inventory € 120,000
- Consumables € 205,000
- Validation € 20,000
- Maintenance € 20,000
- Training and education € 10,000
- Unforeseen € 15,000

Total € 1,500,000

Price per tray VUmc € 12,50

(at 120,000 units a year, housing and energy where not calculated)
Accurate measuring and pricing is needed!

• Categories for specific trays and instruments
  – Measure time needed to compose instruments and trays
  – Set up difficulty levels for types of trays
  – Calculate the time and skills needed to compose the trays

• Pricing of the individual difficulty levels
Compare information with colleagues

- Production data
- Staff data
- Budgets
- Equipment

Find out what you already knew!

You are doing a great job with very limited resources
Is outsourcing a threat?

• Yes!
  – Comparing business investments to hospital budgets
  – Comparing business information to hospital non-information
  – Comparing business management to hospital management

• Money consuming cleaning department
  – Complying to standards
  – Quality control
  – Staffing is a big part of the costs
Is outsourcing a threat?

• NO!
  – Run your CSSD as a business
  – Know your critical parameters
    • Collect them over the years
  – Comply with the standards
  – Apply a quality system

• Use the additional value of the department
  – Knowledge
  – Experience
Accept the challenge

- Set up a “contract” with your customers
- Provide the hospital with a periodical and annual reports
- Set up a adequate budget
- Set up a price per tray
- Validate your reprocessing process
- Communicate with colleagues
  - National association MSüD
  - International EFHSS
Outsourcing is reality

Accept the challenge
And be prepared!